Amendments to the Claims:

Detailed and Complete Listing of Claims:

- 1. (Currently amended) An analytical device for performing an immunoassay for the detection of a target analyte in a liquid sample comprising:
 - (a) a liquid-permeable porous reaction membrane having an upper and a lower surface, an exposed area of the upper surface having immobilized thereupon an antibody or antigen capable of binding to the target analyte, wherein said immobilized antibody or antigen being concentrated in multiple spotted regions of the said upper surface, and a portion of the lower surface of the reaction membrane in the breadth has no immobilized antigen or antibody,
 - (b) a semi-rigid liquid impervious bottom support layer being attached to the reaction membrane at one end along breadth side through lower surface by water insoluble adhesive or tape having glue on both sides,
 - (c) a body of absorbent material having an upper surface and a lower surface, capable of absorbing liquid, wherein the body of absorbent material is provided separately from the analytical device and wherein in use, the absorbent material is pre-wetted with a liquid and is placed between and in contact with the reaction membrane, which is above the body of the absorbent material and the bottom support layer, which is below the body of the absorbent material and wherein the body of absorbent material is capable of absorbing liquid and
 - (d) wherein the absorbent body is larger in size than the reaction membrane.
 - (a) a reaction membrane which is liquid-permeable and porous and has an upper and lower surface, wherein an exposed area of the upper surface has immobilized thereon an antibody or antigen capable of binding to the target analyte, said immobilized antibody or antigen being concentrated in a multiple spotted region of said upper surface,
 - (b) a semi-rigid liquid-impervious bottom support layer, wherein a portion of the lower surface of the reaction membrane in the breadth corner has no immobilized antibody or antigen, and is attached to the upper surface of the

- support layer by water insoluble adhesive or tape having glue on both sides, and
- (c) a body of absorbent material having an upper surface and a lower surface, capable of absorbing liquid, wherein the body of absorbent material is provided separately from the analytical device and wherein in use, the absorbent material is prewetted with a liquid and is placed between and in contact with the reaction membrane, which is above the body of absorbent material and the bottom support layer, which is below the body of the absorbent material and wherein the body of absorbent material is capable of absorbing liquid
- (d) wherein vacant binding sites on the reaction membrane are blocked with an electron rich blocking protein.
- 2. (Canceled)
- 3. (Previously presented) The analytical device as claimed in claim 1, wherein the size and periphery of the reaction membrane is smaller than the bottom support layer.
- 4. (Previously presented) The analytical device as claimed in claim 1, wherein the upper surface of the absorbent body extends beyond the periphery of the reaction membrane but is smaller than the bottom support layer.
- 5. (Previously presented) The analytical device as claimed in claim 1, wherein the absorbent body is not fitted together with the reaction membrane using compression or adhesives during manufacture.
- 6. (Currently amended) The analytical device as claimed in <u>claim 1</u>, <u>claim 2</u>, wherein the narrow solid-strip thickness is similar or higher than the absorbent body.
- 7. (Canceled)
- 8. (Currently amended) The analytical device as claimed in <u>claim 1</u>, elaim 2, wherein multiple strips of the reaction membrane can be attached to semi-rigid support layer to perform the immunoassay on a batch of samples.
- 9. (Previously presented) The analytical device as claimed in claim 1, wherein the reaction membrane is selected from nitrocellulose, semi-permeable membrane materials, nylon, and polyvinyledine difloride.

- 10. (Previously presented) The analytical device as claimed in claim 1, wherein the reaction member is circular and the average diameter of the reaction membrane is in the range of about 0.22 to about 3 microns.
- 11. (Canceled)
- 12. (Previously presented) The analytical device as claimed in claim 1, wherein more than one specific antibody is immobilized to the membrane in the same or different areas for simultaneous detection of multiple analyte in a sample.
- 13. (Previously presented) The analytical device as claimed in claim 1, wherein the reaction membrane is nitrocellulose and unused binding sites on the nitrocellulose membrane are blocked with the blocking protein.
- 14. (Previously presented) The analytical device as claimed in claim 1, wherein the electron rich blocking proteins are p-hydoxy-phenylpropionic acid-casein conjugate, or p-hydroxy-phenylpropionic acid-gelatin conjugate.
- 15. (Currently amended) The analytical device as claimed in claim 1, wherein the bottom support layer with adequate mechanical strength is selected from the group consisting of polyethylene, plastic and fiberglass.
- 16. (Previously presented) The analytical device as claimed in claim 1, wherein the reaction membrane is attached over the bottom support layer using a water insoluble adhesive applied in the top 4mm lower portion of the membrane.
- 17. (Previously presented) The analytical device as claimed in claim 1, wherein an adhesive tape having glue on both sides may also be used to attach the membrane over the bottom support layer.
- 18. (Previously presented) The analytical device as claimed in claim 1, wherein the absorbent body is selected from the group consisting of cellulose acetate, filter paper, bathroom tissue paper and a suitable absorbent material.
- 19. (Previously presented) The analytical device as claimed in claim 1, wherein the thickness of the absorbent body ranges from about 0.1 to 8.0 mm.
- 20. (Currently amended) The analytical device as claimed in claim 1, further comprising more than one disposable absorbent body, wherein in use, the absorbent material prewetted with a liquid that is placed between and in contact with the reaction membrane,

which is above the body of absorbent material and the bottom support layer, which is below the body of the absorbent material.

the absorbent body is placed between and in contact with the reaction membrane, which is above the body of absorbent material and the bottom support layer, which is below the body of the absorbent material.

- 21. (Canceled)
- 22. (Withdrawn) The analytical device as claimed in claim 1 wherein, assembling of absorbent body for performing immunoassay comprising:
 - (a) soaking the absorbent body with liquid and assembled in such a way that upper surface of the absorbent body is in intimate contact with lower surface of the reaction membrane and upper surface over bottom support layer,
 - (b) removing the entrapped air in between lower and upper surface of reaction membrane and absorbent body by pressing the upper surface of the reaction membrane,
 - (c) the void volume of reaction membrane is saturated and the distance separating the reactive membrane and the absorbent body is such that networks of capillary channels is formed were the two members are in contact,
 - (d) the flow of applied sample or reagent is always downwards and focused without application of any force to the absorbent body, and
 - (e) the void volume of the wetted absorbent body is still sufficient to substantially fill the additional volume of fluid introduced during assay.
- 23. (Withdrawn) The assay method as claimed in claim 22 wherein, absorbent body is soaked in deionized distilled water, buffer and other similar materials.
- 24. (Withdrawn) The assay method as claimed in claim 22 wherein, the upper surface of the reaction membrane is pressed with small roller, rim-less small test-tube and other similar tools.
- 25. (Withdrawn) The assay method as claimed in claim 22 wherein, pre-wetted absorbent body saturates the void volume of reaction membrane, which thereby does not allow spread of sample or immunoassay reagents.
- 26. (Withdrawn) The assay method as claimed in claim 22 wherein, the costly-labeled reagents are used efficiently.

- 27. (Withdrawn) The assay method as claimed in claim 22 wherein, 10 to 100μl of sample or labeled reagents are used.
- 28. (Withdrawn) The assay method as claimed in claim 22 wherein, multiple of 10 to 100µl of sample or labeled reagents are applied.
- 29. (Withdrawn) The assay method as claimed in claim 22 wherein, the label reagent is premixed with standard or sample prior to addition to different areas of the membrane in the device or it can be added after standard or sample addition.
- 30. (Withdrawn) The assay method as claimed in claim 22 wherein, more than one specific antibody is immobilized in the same or different areas for simultaneous detection of multiple analytes in a sample with a single assay device.
- 31. (Withdrawn) The assay method as claimed in claim 22 wherein, after application of samples and reagents absorbent body is discarded.
- 32. (Withdrawn) The assay method as claimed in claim 22 wherein, the reaction membrane is washed directly over device with the help of wash bottle.
- 33. (Withdrawn) The assay method as claimed in claim 22 wherein, for high sensitivity elements of signal amplification are further added.
- 34. (Withdrawn) The assay method -as claimed in claim 22 wherein, the signal amplification method like Super-CARD is applied.
- 35. (Withdrawn) The assay method as claimed in claim 22 wherein, biotinylated tyramine is added directly over reaction membrane in the device.
- 36. (Withdrawn) The assay method as claimed in claim 22 wherein, a fresh pre-wetted absorbent body is assembled and avidin-peroxidase conjugate is added.
- 37. (Withdrawn) The assay method as claimed in claim 36 wherein, the substrate solution added directly over reaction membrane produced color spots within well-defined area.
- 38. (Withdrawn) The assay method as claimed in claim 37 wherein, the exposed area of the reaction membrane is sufficiently greater to allow visualization of the intensity of the color spots.
- 39. (Withdrawn) The assay method as claimed in claim 38 wherein, visual comparison with known concentration in reference standard gives semi-quantitative estimate of the amount of antigen present in the sample.

- 40. (Withdrawn) The assay method as claimed in claim 36 wherein, the substrate solution is added directly without application of signal amplification.
- 41. (Withdrawn) The assay method as claimed in claim 36 wherein, signal amplification step is not necessary for that analyte which is present in high concentration.
- 42. (Withdrawn) The assay method as claimed in claim 22 wherein, the assay results is obtained within 3 to 10 minutes.
- 43. (Withdrawn) The assay method as claimed in claim 22 wherein, the analyte is selected from the group consisting of antigens, antibodies, haptens, drugs, hormones, macromolecules, toxins, bacteria, viruses, enzymes, tumor markers, environmental pollutants, nucleic acids and other natural receptors.
- 44. (Previously presented) The analytical device as claimed in claim 10, wherein the diameter of the reaction membrane is about 0.45 microns.
- 45. (Canceled)
- 46. (Canceled)